BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Asphalting to Sainagara phase-I and surrounding ares in ward no-03 Yelahanka satellite Town sub Division

Estimation Cost.Rs 20000000.00

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	Muniswamappa layout								
	2nd Cross road	Cum	1	300.00	1.25	0.90	337.50		
	Cross Road	Cum	2	25.60	1.25	0.90	57.60		
	Cross road joining 1st cross muneshwara layout	Cum	1	12.10	1.05	0.90	11.43		
	muniswamappa layout								
	1st Cross Road	Cum	1	15.30	1.05	0.90	14.46		
	Anugraha layout								
	1st Cross Road	Cum	2	116.70	1.25	0.90	262.58		
	2nd main Road	Cum	1	25.00	1.25	0.90	28.13		
	1st main Road	Cum	1	75.90	1.10	0.90	75.14		
	Sainagar Phase-II								
	3rd Cross Road	Cum	2	63.40	1.10	0.90	125.53		
	4th Cross Road	Cum	2	84.50	1.10	0.90	167.31		
	Culvert								
	Muniswamappa layout								
	2nd cross road	Cum	1	5.50	1.30	1.00	7.15		
	Anugraha layout								
	1st main Road								
		Cum	1	5.50	1.30	1.00	7.15		
		Cum	1	6.30	1.30	1.00	8.19		
	For Rain water Harvesting								
		Cum	5	0.31		1.80	2.81		
				(3.142*0.63*0.63)/4=0.31					
	Basic rate	130.00							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Area weightage 6%	7.80							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	207.60							
	Total						1104.97	207.60	229393.00
2	KSRRB M2100 PCC 1 KSRRB M2100-10. Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications.MORTH Specification No. 2100 Pg no:222 Item no:27.18								
	New Drain								
	Muniswamappa layout								
	2nd Cross road	Cum	1	300.00	1.25	0.15	56.25		
	Cross Road	Cum	2	25.60	1.25	0.15	9.60		
	Cross road joining 1st cross muneshwara layout	Cum	1	12.10	1.05	0.15	1.91		
	muniswamappa layout								
	1st Cross Road	Cum	1	15.30	1.05	0.15	2.41		
	Anugraha layout								
	1st Cross Road	Cum	2	116.70	1.25	0.15	43.76		
	2nd main Road	Cum	1	25.00	1.25	0.15	4.69		
	1st main Road	Cum	1	75.90	1.10	0.15	12.52		
	Sainagar Phase-II								
	3rd Cross Road	Cum	2	63.40	1.10	0.15	20.92		
	4th Cross Road	Cum	2	84.50	1.10	0.15	27.89		
	Culvert								
	Muniswamappa layout								
	2nd cross road	Cum	1	5.50	1.30	0.15	1.07		
	Anugraha layout								
	1st main Road								
		Cum	1	5.50	1.30	0.15	1.07		
		Cum	1	6.30	1.30	0.15	1.23		
	Basic rate	5115.00							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Area weightage 6%	306.90							
	Sub Total	5421.90							
	Total						183.32	5421.90	993940.00
3	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	New Drain								
	Muniswamappa layout								
	2nd Cross road								
	Bottom Slab	Cum	1	300.00	1.10	0.15	49.50		
	Side Walls	Cum	2	300.00	0.15	0.60	54.00		
	Cross Road								
	Bottom Slab	Cum	2	25.60	1.10	0.15	8.45		
	Side Walls	Cum	4	25.60	0.15	0.60	9.22		
	Cross road joining 1st cross muneshwara layout								
	Bottom Slab	Cum	1	12.10	0.90	0.15	1.63		
	Side Walls	Cum	2	12.10	0.15	0.60	2.18		
	muniswamappa layout								
	1st Cross Road								
	Bottom Slab	Cum	1	15.30	0.90	0.15	2.07		
	Side Walls	Cum	2	15.30	0.15	0.60	2.75		
	Anugraha layout								
	1st Cross Road								
	Bottom Slab	Cum	2	116.70	1.10	0.15	38.51		
	Side Walls	Cum	4	116.70	0.15	0.60	42.01		
	2nd main Road								
	Bottom Slab	Cum	1	25.00	1.10	0.15	4.13		
	Side Walls	Cum	2	25.00	0.15	0.60	4.50		
	1st main Road								
	Bottom Slab	Cum	1	75.90	1.10	0.15	12.52		
	Side Walls	Cum	2	75.90	0.15	0.60	13.66		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Sainagar Phase-II								
	3rd Cross Road								
	Bottom Slab	Cum	2	63.40	1.10	0.15	20.92		
	Side Walls	Cum	4	63.40	0.15	0.60	22.82		
	4th Cross Road								
	Bottom Slab	Cum	2	84.50	1.10	0.15	27.89		
	Side Walls	Cum	4	84.50	0.15	0.60	30.42		
					Sub Total		347.18		
	Culvert								
	Muniswamappa layout								
	2nd cross road								
	Bottom Slab	Cum	1	5.50	1.30	0.20	1.43		
	Side Walls	Cum	2	5.50	0.20	0.60	1.32		
	Anugraha layout								
	1st main Road								
	Bottom Slab	Cum	1	5.50	1.30	0.20	1.43		
	Side Walls	Cum	2	5.50	0.20	0.60	1.32		
	Bottom Slab	Cum	1	6.30	1.30	0.20	1.64		
	Side Walls	Cum	2	6.30	0.20	0.60	1.51		
					Sub Total		8.65		
	Basic rate	6670.00							
	Area weightage 6%	400.20							
	Sub Total	7070.20							
	Total						355.83	7070.20	2515786.00
4	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum	From item No 03				347.18		
		kg	Steel assumed 59Kg/Cum of Concrete				20389.85		
		tonne					20.39		
	For Culvert	Cum	From item No 03				8.65		
		kg	Steel assumed 100Kg/Cum of Concrete				865.00		
		tonne					0.87		
	Basic rate	68233.00							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Area weightage 6%	4093.98							
	Sub Total	72326.98							
	Total						21.25	72326.98	1537300.00
5	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Muniswamappa layout								
	2nd Cross road	Sqm	1	300.00	0.90		270.00		
	Cross Road	Sqm	2	25.56	0.90		46.01		
	Cross road joining 1st cross muneshwara	Sqm	1	12.10	0.90		10.89		
	muniswamappa layout								
	1st Cross Road	Sqm	1	15.25	0.90		13.73		
	Anugraha layout								
	1st Cross Road	Sqm	2	116.65	0.90		209.97		
	2nd main Road	Sqm	1	25.00	0.90		22.50		
	1st main Road	Sqm	1	75.90	0.90		68.31		
	Sainagar Phase-II								
	3rd Cross Road	Sqm	2	63.36	0.90		114.05		
	4th Cross Road	Sqm	2	84.46	0.90		152.03		
	Data rate	2337.00							
	Total						907.48	2337.00	2120779.00
6	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc.,								
	Muniswamappa layout								
	2nd cross road	Sqm	1	5.50	1.20		6.60		
	Anugraha layout								
	1st main Road								
		Sqm	1	5.50	1.20		6.60		
		Sqm	1	6.30	1.20		7.56		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Data rate	5418.00							
	Total						20.76	5418.00	112478.00
7	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	Muniswamappa layout								
	2nd Cross road	Cum	1	300.00	0.20	0.05	3.00		
	Cross Road	Cum	2	25.56	0.20	0.05	0.51		
	1st Cross Road	Cum	1	293.00	0.20	0.05	2.93		
	Anugraha layout								
	1st Cross Road	Cum	2	116.65	0.20	0.05	2.33		
	2nd main Road	Cum	1	25.00	0.20	0.05	0.25		
	1st main Road	Cum	1	39.70	0.20	0.05	0.40		
	Sainagar Phase-II								
	3rd Cross Road	Cum	2	63.36	0.20	0.05	1.27		
	4th Cross Road	Cum	2	84.46	0.20	0.05	1.69		
	Sai Archid								
	Sai Archid 1st Cross	Cum	2	105.00	0.20	0.05	2.10		
	2nd Cross Road	Cum	2	97.60	0.20	0.05	1.95		
					Sub Total		16.43		
	Basic rate	5422.00							
	Area weightage 6%	325.32							
	Sub Total	5747.32							
	Total						16.43	5747.32	94427.00
8	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	Muniswamappa layout								
	2nd Cross road	m	1	300.00			300.00		
	Cross Road	m	2	25.56			51.12		
	1st Cross Road	m	1	293.00			293.00		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Anugraha layout								
	1st Cross Road	m	2	116.65			233.30		
	2nd main Road	m	1	25.00			25.00		
	1st main Road	m	1	39.70			39.70		
	Sainagar Phase-II								
	3rd Cross Road	m	2	63.36			126.72		
	4th Cross Road	m	2	84.40			168.80		
	Sai Archid								
	Sai Archid 1st Cross	m	2	105.00			210.00		
	2nd Cross Road	m	2	97.60			195.20		
					Sub Total		1642.84		
	No of Kerb Stones	Nos	Total Length/0.45				3651.00		
	Sub Total	Nos					3651.00		
	Basic rate	408.00							
	Area weightage 6%	24.48							
	Sub Total	432.48							
	Total						3651.00	432.48	1578985.00
9	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	Muniswamappa layout								
	2nd Cross road	Sqm	1	300.00		0.40	120.00		
	Cross Road	Sqm	2	25.56		0.40	20.45		
	1st Cross Road	Sqm	1	293.00		0.40	117.20		
	Anugraha layout								
	1st Cross Road	Sqm	2	116.65		0.40	93.32		
	2nd main Road	Sqm	1	25.00		0.40	10.00		
	1st main Road	Sqm	1	39.70		0.40	15.88		
	Sainagar Phase-II								
	3rd Cross Road	Sqm	2	63.36		0.40	0.00		
	4th Cross Road	Sqm	2	84.40		0.40	50.69		
							67.52		
	Sai Archid								
	Sai Archid 1st Cross	Sqm	2	105.00		0.40	84.00		
	2nd Cross Road	Sqm	2	97.60		0.40	78.08		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Basic rate	80.00							
	Area weightage 6%	4.80							
	Sub Total	84.80							
	Total						657.14	84.80	55726.00
10	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	muniswamappa layout								
	2nd cross road	Cum	1	305.70	6.01	0.50	918.03		
	Cross road	Cum	1	25.20	5.05	0.50	63.63		
	Anugraha layout								
	1st Cross road	Cum	1	130.00	5.55	0.50	360.75		
	2nd cross road	Cum	1	128.60	5.40	0.50	347.22		
	2nd main Road	Cum	1	109.60	6.55	0.50	358.94		
	1st main Road	Cum	1	68.20	6.22	0.50	211.99		
	Basic rate	41.00							
	Area weightage 6%	2.46							
	5Km lead= (2*1.28*5)	12.80							
	Sub Total	56.26							
	Total						2260.56	56.26	127180.00
11	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)								
	muniswamappa layout								
	2nd cross road	Sqm	1	305.70	6.01		1836.06		
	Cross road	Sqm	1	25.20	5.05		127.26		
	Anugraha layout								
	1st Cross road	Sqm	1	130.00	5.55		721.50		
	2nd cross road	Sqm	1	128.60	5.40		694.44		
	2nd main Road	Sqm	1	109.60	6.55		717.88		
	1st main Road	Sqm	1	68.20	6.22		423.98		
	Basic rate	6.00							
	Area weightage 6%	0.36							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Sub Total	6.36							
	Total						4521.12	6.36	28755.00
12	Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305								
	muniswamappa layout								
	2nd cross road	Cum	1	305.70	6.01	0.20	367.21		
	Cross road	Cum	1	25.20	5.05	0.20	25.45		
	Anugraha layout								
	1st Cross road	Cum	1	130.00	5.55	0.20	144.30		
	2nd cross road	Cum	1	128.60	5.40	0.20	138.89		
	2nd main Road	Cum	1	109.60	6.55	0.20	143.58		
	1st main Road	Cum	1	68.20	6.22	0.20	84.80		
	Basic rate	325.00							
	Area weightage 6%	19.50							
	Sub Total	344.50							
	Total						904.22	344.50	311506.00
13	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	muniswamappa layout								
	2nd cross road	Cum	1	305.70	6.01	0.15	275.41		
	Cross road	Cum	1	25.20	5.05	0.15	19.09		
	Anugraha layout								
	1st Cross road	Cum	1	130.00	5.55	0.15	108.23		
	2nd cross road	Cum	1	128.60	5.40	0.15	104.17		
	2nd main Road	Cum	1	109.60	6.55	0.15	107.68		
	1st main Road	Cum	1	68.20	6.22	0.15	63.60		
	Basic rate	1882.00							
	Area weightage 6%	112.92							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Sub Total	1994.92							
	Total						678.17	1994.92	1352892.00
14	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	muniswamappa layout								
	2nd cross road	Cum	1	305.70	6.01	0.25	459.02		
	Cross road	Cum	1	25.20	5.05	0.25	31.82		
	Anugraha layout								
	1st Cross road	Cum	1	130.00	5.55	0.25	180.38		
	2nd cross road	Cum	1	128.60	5.40	0.25	173.61		
	2nd main Road	Cum	1	109.60	6.55	0.25	179.47		
	1st main Road	Cum	1	68.20	6.22	0.25	105.99		
	Basic rate	1888.00							
	Area weightage 6%	113.28							
	Sub Total	2001.28							
	Total						1130.28	2001.28	2262008.00
15	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	muniswamappa layout								
	2nd cross road	Sqm	1	305.70	6.01		1836.06		
	Cross road	Sqm	1	25.20	5.05		127.26		
	Anugraha layout								
	1st Cross road	Sqm	1	130.00	5.55		721.50		
	2nd cross road	Sqm	1	128.60	5.40		694.44		
	2nd main Road	Sqm	1	109.60	6.55		717.88		
	1st main Road	Sqm	1	68.20	6.22		423.98		
	Basic rate	32.00							
	Area weightage 6%	1.92							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Sub Total	33.92							
	Total						4521.12	33.92	153357.00
16	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	muniswamappa layout								
	2nd cross road	Cum	1	305.70	6.01	0.05	91.80		
	Cross road	Cum	1	25.20	5.05	0.05	6.36		
	Anugraha layout								
	1st Cross road	Cum	1	130.00	5.55	0.05	36.08		
	2nd cross road	Cum	1	128.60	5.40	0.05	34.72		
	2nd main Road	Cum	1	109.60	6.55	0.05	35.89		
	1st main Road	Cum	1	68.20	6.22	0.05	21.20		
	Basic rate	7008.00							
	Area weightage 6%	420.48							
	Sub Total	7428.48							
	Total						226.06	7428.48	1679254.00
17	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
		Sqm	From Item num 15				4521.12		
	Basic rate	12.00							
	Area weightage 6%	0.72							
	Sub Total	12.72							
	Total						4521.12	12.72	57509.00
18	Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications.Clause 507 of MORTH V revision as per IRC SP-53-2015 - using 40-60 TPH capacity HMP with mechanical Paver, Gr-II (30-45mm) with 5.4 % of modified bitumen binder consisting of 4.97% VG- 30 bitumen (60/70 grade) 0.43% Plastomeric Thermoplastics (Waste plastic Additive).(P.No-171I No-21.78.12)								
	muniswamappa layout								
	2nd cross road	Cum	1	305.70	6.01	0.04	73.44		
	Cross road	Cum	1	25.20	5.05	0.04	5.09		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Anugraha layout								
	1st Cross road	Cum	1	130.00	5.55	0.04	28.86		
	2nd cross road	Cum	1	128.60	5.40	0.04	27.78		
	2nd main Road	Cum	1	109.60	6.55	0.04	28.72		
	1st main Road	Cum	1	68.20	6.22	0.04	16.96		
	Basic rate	8207.00							
	Area weightage 6%	492.42							
	Sub Total	8699.42							
	Total						180.84	8699.42	1573246.00
19	**KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	muniswamappa layout								
	2nd cross road	Sqm	2	305.70	0.10		61.14		
	Cross road	Sqm	2	25.20	0.10		5.04		
	Anugraha layout								
	1st Cross road	Sqm	2	130.00	0.10		26.00		
	2nd cross road	Sqm	2	128.60	0.10		25.72		
	2nd main Road	Sqm	2	109.60	0.10		21.92		
	1st main Road	Sqm	2	68.20	0.10		13.64		
	Basic rate	429.00							
	Area weightage 6%	25.74							
	Sub Total	454.74							
	Total						153.46	454.74	69785.00
20	KSRRB M800 Road markers/ Road stud , KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS (Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering thje lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97-DO III Dt 11.06.1997.The height, width and length shall not exceed 50mm, 100mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree.The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19mm and height not less than 30mm)from the body is to be a minimum value of 500kg. Fixing will be by drilling holes on the road for the shanks to go inside, without ails and using epoxy resin based adhesive as per manufacture's recommendation and complete as directed by the engineer.(P.No-187,I No-24.41)								
	Road Studs along Road Length								

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	muniswamappa layout								
	2nd cross road	m	1	305.70			305.70		
		Nos			Sub Total		305.70		
	Provide Studs for every 3 m along Road lenth								
	Number of Studs along Road Length			Total length/3			102.00		
	Basic rate	337.00							
	Area weightage 6%	20.22							
	Sub Total	357.22							
	Total						102.00	357.22	36437.00
21	Filling in foundation with granite/trap broken metal 100mm and down size ,with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications.								
	a) 40mm Jelly	Cum	5	0.31		0.40	0.62		
				(3.142*0.63*0.63)/4=0.31					
	Total						0.62	1901.00	1186.00
	b) 20mm Jelly	Cum	5	0.31		0.40	0.62		
				(3.142*0.63*0.63)/4=0.31					
	Total						0.62	1901.00	1186.00
	c) Coarse sand	Cum	5	0.31		0.30	0.47		
				(3.142*0.63*0.63)/4=0.31					
	Total						0.47	2651.00	1240.00
	d) Fine sand	Cum	5	0.31		0.20	0.31		
				(3.142*0.63*0.63)/4=0.31					
	Total						0.31	2651.00	827.00
	e) 12.5mm chips	Cum	5	0.31		0.30	0.47		
				(3.142*0.63*0.63)/4=0.31					
	Total						0.47	1901.00	889.00

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
26.00	Providing of Geonets for Rain Water Harvesting pit on the filter media as specified in drawings or as approved by Engineer Incharge								
		Sqm	5.00	0.31			1.56		
				(3.142*0.63*0.63)/4=0.31					
	Sub Total	71.03							
	Total						1.56	71.03	110.72
								Grand Total	~~16537666.29~~ 16896181=00
								DPR Charges (1% of estimated cost)	200000.00
								Project management And Consultancy Charges(1% of estimated cost)	200000.00
								GST Charges (12% of estimated cost)	~~2256000.00~~ 2027541=00
								KRIDL Charges (4% of estimated cost)	~~800000.00~~ 675847=00
								Miscellenious and rounding	~~6333.71~~ 431=00
								Total Amount	20000000.00
									RUPEES TWO CRORE ONLY

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer
BBMP

Assistant Engineer
BBMP

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ಯಲಹಂಕ ಉಪವಿಭಾಗ,
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Executive Engineer
BBMP

RUDRAPRASAD CONSULTANTS BANGALORE

Administrative Sanction for Rs. 200.00 Lakhs
Two crore
is accorded under head P-3749
C.M. Nava nagarothana 110 village grants (Annexure-07)
Registered as CE No. ..... Subject to conditions contained in enclosed memo
No. EE/YNK/67/2019-20 Dt. 7/11/2019

Executive Engineer

Technical Sanction
Accorded For Rs 200.00 lakhs
Head of A/C P3749
CER NO : 209 Dt 08.11.19

TA CE (YNK)